

10/537782
JC17 Rec'd PCT/PTO 06 JUN 2005**AMENDMENTS TO THE CLAIMS:**

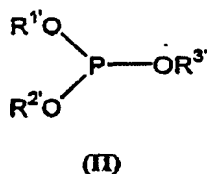
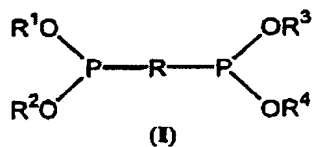
This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) An adhesive silicone elastomer composition which can be crosslinked under hot conditions by polyaddition (hydrosilylation), this composition being of the type of those comprising:

- ◆ α / at least one PolyOrganoSiloxane (POS) carrying ethylenic and/or acetylenic unsaturation(s) {POS comprising $\equiv\text{Si}$ -[unsaturation] units};
- ◆ β / at least one polyorganosiloxane (POS) carrying $\equiv\text{Si-H}$ units;
- ◆ γ / a catalytic combination comprising:
 - ~ $\gamma.1$ at least one metal catalyst (preferably based on platinum)
 - ~ $\gamma.2$ and at least one crosslinking inhibitor;
- ◆ δ / a filler;
- ◆ ϵ / at least one adhesion promoter;
- ◆ ρ / at least one POS resin;
- ◆ λ / at least one agent for stability toward heat;
- ◆ ϕ / optionally at least one other functional additive;

~~characterized in that it is~~ said composition being a single-component composition ~~and in that~~ wherein the crosslinking inhibitor $\gamma.2$ is selected from the group of compounds of following formula (I) or (II):



in which:

R, R¹, R², R³, R⁴, R^{1'}, R^{2'} and R^{3'}, which are identical or different, represent a linear, branched or cyclic alkyl radical or a substituted or unsubstituted aryl radical, in particular:

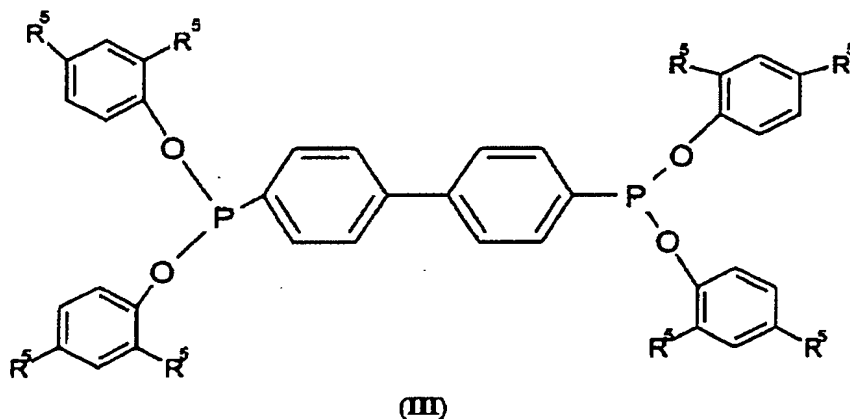
- i. a linear or branched alkyl radical having in particular from 2 to 30 carbon atoms (C), preferably from 2 to 12 C,
- ii. an alkyl radical comprising one or more rings, in particular 1 or 2, it being possible for a ring to have in particular from 4 to 14 C, preferably from 5 to 8 C, or
- iii. an aryl or alkylaryl radical comprising one or more fused or nonfused aromatic rings, in particular 1 or 2 rings, it being possible for a ring to comprise from 4 to 14 C, preferably from 6 to 8 C, optionally substituted by 1 or more, in particular from 1 to 2, linear or branched alkyl(s) having in particular from 1 to 12 C, preferably from 4 to 12 C.

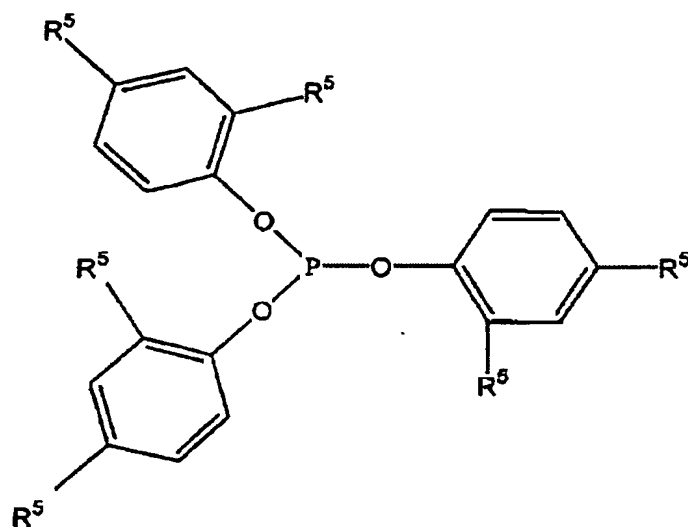
2. (Currently Amended) The composition as claimed in claim 1, ~~characterized in that~~ wherein the R radical of the formula (I) of the inhibitor γ .2 is a

cyclic alkyl or an aryl radical, preferably the biphenyl radical.

3. (Currently Amended) The composition as claimed in claim 1, ~~characterized in that~~ wherein the R^1 , R^2 , R^3 , R^4 , $R^{1'}$, $R^{2'}$ and $R^{3'}$ radicals of the formulae (I) and (II) of the inhibitor $\gamma.2$ are cyclic alkyls, aryls or alkylaryls, preferably substituted phenyls.

4. (Currently Amended) The composition as claimed in claim 1, ~~characterized in that~~ wherein the inhibitor $\gamma.2$ corresponds to either of the following formulae (III) and (IV):

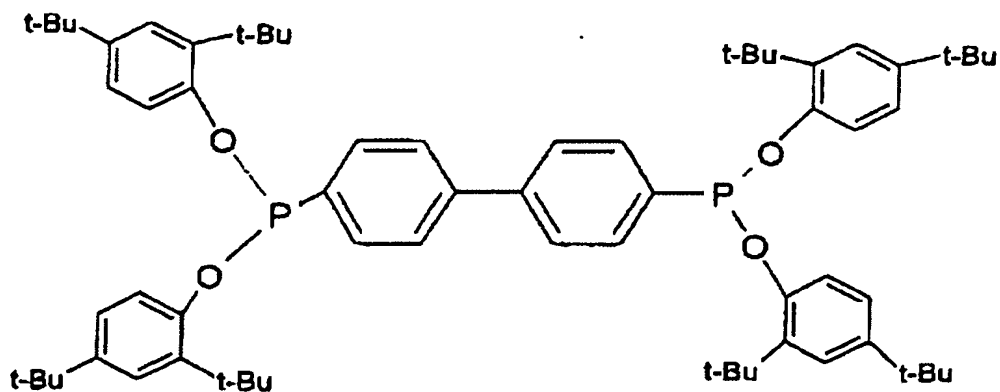




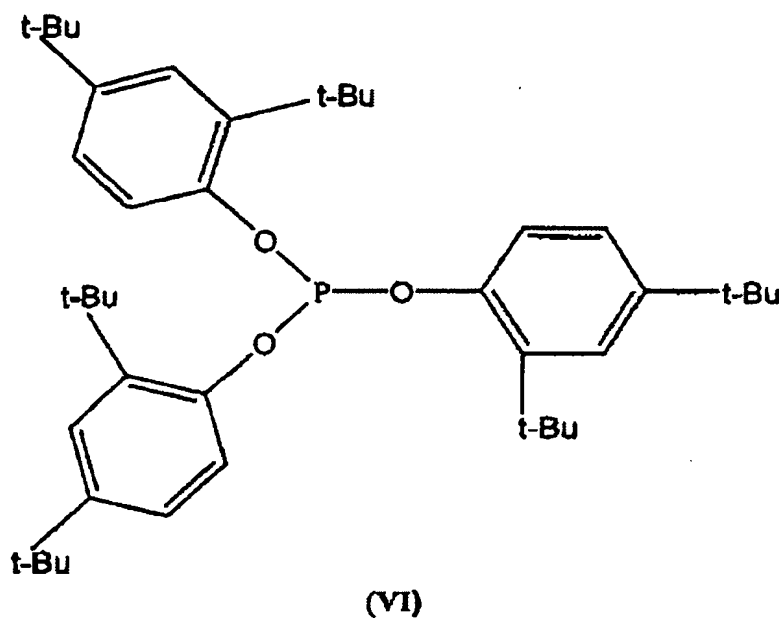
(IV)

in which the R^5 radicals, which are identical or different, preferably identical, are linear or branched alkyls having in particular from 1 to 12 C, preferably from 4 to 12 C.

5. (Currently Amended) The composition as claimed in claim 1, characterized in that wherein the inhibitor γ .2 corresponds to the formula (V) or (VI):



(V)



6. (Currently Amended) The composition as claimed in ~~any one of claims 1 to 5~~, characterized in that claim 1, wherein the catalyst $\gamma.1$ is a platinum catalyst.

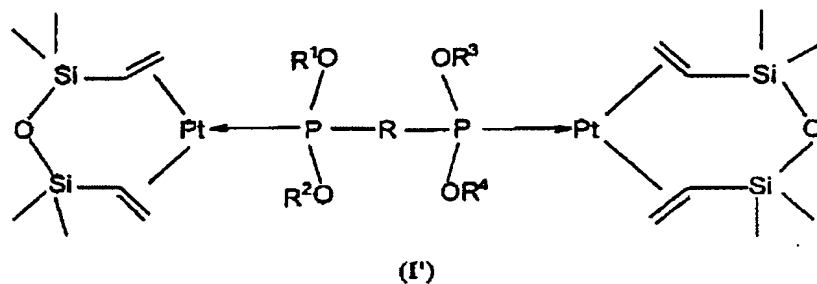
7. (Currently Amended) The composition as claimed in ~~any one of claims 1 to 6~~, characterized in that claim 1, wherein the phosphorus of $\gamma.2$ /platinum of $\gamma.1$ ratio by weight is such that:

- $P/Pt \geq 1$,
- preferably, $5 \geq P/Pt \geq 1$,
- and, more preferably still, $4 \geq P/Pt \geq 1$.

8. (Currently Amended) The catalytic composition as claimed in claim 6, ~~characterized in that~~ wherein the catalyst $\gamma.1$ is a platinum/unsaturated siloxane complex, preferably a platinum/

vinylsiloxane complex and more preferably still a Karstedt complex.

9. (Currently Amended) The composition as claimed in claim 8, ~~characterized in that~~ wherein the catalytic combination γ comprises the following chemical entity (I'):



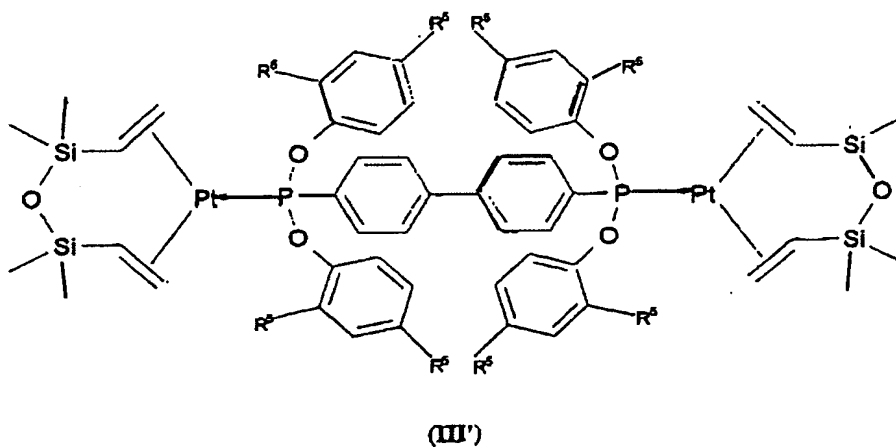
in which:

R, R¹, R², R³ and R⁴, which are identical or different, represent a linear, branched or cyclic alkyl radical or a substituted or unsubstituted aryl radical, in particular:

- i. a linear or branched alkyl radical having in particular from 2 to 30 carbon atoms (C), preferably from 2 to 12 C,
- ii. an alkyl radical comprising one or more rings, in particular 1 or 2, it being possible for a ring to have in particular from 4 to 14 C, preferably from 5 to 8 C, or
- iii. an aryl or alkylaryl radical comprising one or more fused or nonfused aromatic rings, in particular 1 or 2 rings, it being possible for a ring to comprise from 4 to 14 C, preferably from 6 to 8 C, optionally substituted by 1 or more, in particular from 1 to 2, linear or branched alkyl(s) having in particular from 1 to

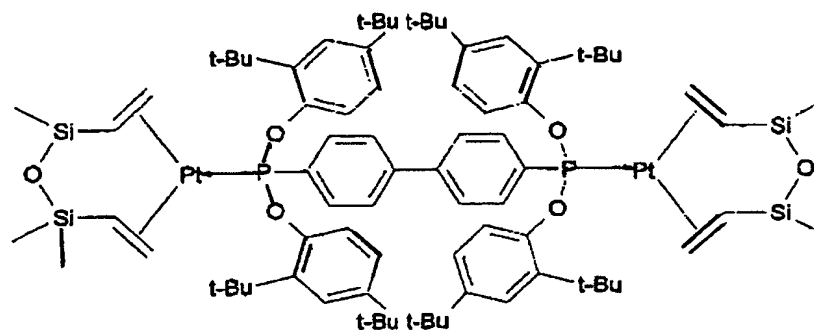
12 C, preferably from 4 to 12 C.

10. The composition as claimed in claim 9, ~~characterized in that~~ wherein the catalytic combination γ comprises the following chemical entity (III'):



in which the R^5 radicals, which are identical or different, preferably identical, are linear or branched alkyls having in particular from 1 to 12 C, preferably from 4 to 12 C.

11. (Currently Amended) The composition as claimed in claim 10, ~~characterized in that~~ wherein the catalytic combination γ comprises the following chemical entity (V'):



(V)

12. (Currently Amended) The composition as claimed in claim 1, characterized in that wherein:

- ◆ the α POS or POSs comprise siloxyl units



and siloxyl units of formula:



- ◆ the β POS or POSs comprise siloxyl units



and siloxyl units of formula:



in which formulae the various symbols have the following meaning:

- ⇒ the R^6 symbols, which are identical or different, each represent a nonhydrolyzable group of hydrocarbon nature, it being possible for this radical to be:
- * an alkyl radical having from 1 to 5 carbon atoms which can comprise from 1 to 6 chlorine atoms,

- * cycloalkyl radicals having from 3 to 8 carbon atoms which can comprise from 1 to 4 chlorine atoms,
 - * aryl or alkylaryl radicals having from 6 to 8 carbon atoms which can comprise from 1 to 4 chlorine atoms,
 - * cyanoalkyl radicals having from 3 to 4 carbon atoms; methyl, ethyl, propyl, isopropyl, butyl, isobutyl, n-pentyl, t-butyl, chloromethyl, dichloromethyl, α -chloroethyl, α,β -dichloroethyl, β -cyanoethyl, γ -cyano-propyl, phenyl, p-chlorophenyl, m-chlorophenyl, 3,5-dichlorophenyl, trichlorophenyl, tetrachlorophenyl, o-, p- or m-tolyl, and xylyl, such as 2,3-dimethylphenyl or 3,4-dimethylphenyl, groups being preferred; methyl and phenyl radicals being particularly preferred;
- ⇒ the Z symbols represent a C₂-C₆ alkenyl group (preferably a vinyl group);
- ⇒ n = an integer equal to 0, 1, 2 or 3;
- ⇒ x = an integer equal to 0, 1, 2 or 3;
- ⇒ y = an integer equal to 0, 1 or 2;
- ⇒ the sum x + y lies within the range from 1 to 3,
- ⇒ w = an integer equal to 0, 1, 2 or 3.

13. (Currently Amended) The composition as claimed in claim 12, ~~characterized in that it comprises~~ comprising:

- α / - at least one POS exhibiting, per molecule, at least two C₂-C₆ alkenyl groups bonded to silicon;
- β / - at least one POS exhibiting, per molecule, at least two hydrogen atoms

bonded to silicon;

- γ / - a catalytic combination as defined in ~~claims 2 to~~ claim 12;
- ϵ / an adhesion promoter, preferably a binary adhesion promoter and more preferably still an adhesion promoter consisting of:
 - $\Delta \epsilon.1 \Delta$ at least one alkoxyated organosilane comprising, per molecule, at least one C₂-C₆ alkenyl group,
 - $\Delta \epsilon.2 \Delta$ at least one organosilicon compound comprising at least one epoxy radical;
- δ / an inorganic and/or microsphere and/or hollow and/or expanded and/or expandable inorganic filler;
- ρ / optionally at least one POS resin carrying T and/or Q, optionally M and/or D, siloxyl units and alkenyl-comprising siloxyl units, preferably vinyl-comprising siloxyl units of M^{Vi} and/or D^{Vi} type, resins of MM^{Vi}DD^{Vi}Q type being very particularly preferred;
- λ / optionally at least one colorant;
- ϕ / optionally at least one other functional additive.

14. (Currently Amended) The composition as claimed in claim 12 ~~or 13~~, ~~characterized in that it is~~ which is an RTV composition ~~and in that~~ wherein its POS α and/or ρ constituent(s) is(are) chosen from alkenylsilyl POSs having a viscosity η at 25°C such that:

$$200 \leq \eta \leq 200\,000 \text{ mPa}\cdot\text{s}$$

$$\text{preferably, } 500 \leq \eta \leq 100\,000 \text{ mPa}\cdot\text{s}_.$$

15. (Currently Amended) A process for the preparation of the composition as claimed in ~~any one of claims 1 to 14, characterized:~~ claim 1:

➤ ~~in that~~ comprising preparing the catalytic combination γ ~~is obtained:~~

- either by mixing the inhibitor $\gamma.2$ with a solution/dispersion of catalyst $\gamma.1$, preferably in an optionally vinyl-comprising polysiloxane oil,
- or by mixing the catalyst $\gamma.1$ in a dispersion of the inhibitor $\gamma.2$ in a silicone oil, preferably a vinyl-comprising silicone oil, with a viscosity of less than or equal to 100 000 mPa·s at 25°C;

➤ and ~~in that~~ further comprising:

- a) first of all mixing a portion of the constituents, with the exception of the catalytic combination γ , ~~is mixed~~;
- b) heating ~~is carried out~~, preferably under vacuum;
- c) cooling ~~is carried out~~;
- d) and then adding the remainder of the constituents, except for the catalytic combination γ , ~~is added~~ with stirring to the premix thus obtained and, finally, adding the catalytic combination γ ~~is added~~.

16. – 17. (Cancelled)

18. (New) A method for adhesively assembling at least two elements comprising coating at least one of the elements to be assembled with a layer of an adhesive composition as claimed in claim 1, applying said elements against one another with said layer therebetween, and crosslinking said adhesive composition.

19. (New) A method for adhesively assembling at least two elements consisting essentially of coating at least one of the elements to be assembled with a layer of an adhesive composition as claimed in claim 1, applying said elements against one another with said layer therebetween, and crosslinking said adhesive composition.

20. (New) The method according to claim 18, wherein the crosslinking is carried out by heating.

21. (New) The method according to claim 18, wherein the elements to be assembled are two in number.

22. (New) The method according to claim 18, wherein one of the elements to be assembled is a woven, knitted or nonwoven fibrous material.